



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,157	07/23/2003	Mark Bendett	GK-ZEI-3215/ 500343.20226	7991
26418	7590	06/30/2005	EXAMINER	
REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650			FARAH, AHMED M	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,157

Applicant(s)

BENDETT ET AL.

Examiner

Ahmed M. Farah

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 24-26, 28-31 and 34-46 is/are rejected.
- 7) ☒ Claim(s) 27, 32 and 33 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/25/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-31, 40, 44, and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation "material surface and the severed portion of the material," in claim 30 is not clear and therefore renders the claim indefinite. As to claims 44 and 45, similar language in the claims renders the claims indefinite.

Claim 28 recites the limitation "the first cut" in 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the beam deflection device" in 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24-26, 34-37, 39 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Mourou et al. U.S. patent No. 5,656,186.

Mourou et al. disclose apparatus and methods of use for applying laser beams onto a tissue, the apparatus comprising a pulsed laser, wherein the laser pulse has a wavelength of between 770 nm to 800 nm (see col. 5, line 26 and col. 8, line 29), a pulse width of 10 to 100 fs (col. 2, lines 32-40 and col.8, line 33), pulse energy of 0.001 to 10 nJ, and frequency of 250 to 350 KHz (col. 4, line 35).

As to claim 26, the laser pulse is focused on the material being treated as presently claimed (col. 1, line 59-61).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mourou et al. in view of Gerlach et al. U.S. Patent No. 6872,202.

Mourou et al., described above, do not teach the use of a fiber laser or disk laser, or their combination thereof. However, the use of different laser, such as a fiber or disk laser to treat a material is well known in the art. Gerlach et al. teach an ophthalmic laser device wherein the radiation source is selected from the group consisting of a diode laser, fiber laser, etc. Therefore, at the time of the applicant's invention, it would have been obvious to one skilled in the art to use a fiber or disk laser as an equivalent alternative source to provide the treatment energy.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mourou et al. in view of Colvard et al. U.S. Patent No. 5,738,677

Mourou et al., described above, do not teach a method of fragmenting material in the target tissue into small fragments and extracting these fragments by means of a section device. Colvard et al. disclose an ophthalmic laser device and method for fragmenting a lens tissue and removing the fragments by means of a section device. Thus, it would have been obvious to one skilled in the art at the time of the applicant's invention to use a section device in order to remove debris from the treatment site.

Allowable Subject Matter

Claims 27, 32 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A.F. J. Levi et al. "Room temperature operation of sub-micron radius disk laser," Electronics Letters, 29, 1666-1667 (1993), discloses the use of a disk laser.

Captain Steven M. Massey "High-Power, High-Efficiency Spinning Disk Laser," DE-04-02 (<http://www.afrlhorizons.com/Briefs/Feb05/DE0402.html>), discloses the architectures, power and controls of an alternative disk laser.

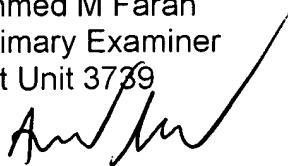
Art Unit: 3739

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahmed M. Farah whose telephone number is (571) 272-4765. The examiner can normally be reached on Mon-Thur. 9:30 AM-7:30 PM, and 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M DVorak can be reached on (571) 272-4768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ahmed M Farah
Primary Examiner
Art Unit 3739



June 26, 2005